USDA **United States Department of Agriculture** | **Forest Service** | **Northeastern Area State and *Private* Forestry** | **180 Canfield Street Morgantown, WV 26505- 3101**

File **3400** **Date: 10thJan2002**
Route To:

Subject: **Progress *of* BBD *on the* ANF**

To: Bob White

Our Cartographer Dr. Ann Steketee produced the attached map. I had her produce it as an informational layer following the format previously used by DeLost and Omer. Should you need to use it as a layer on an existing or new ANF map, just let one of us know.

The 1990 and 1996, lines were taken from previous maps layers.

The 2000 scale front line was the result of a roadside survey conducted by Bob Acciavatti and I. Areas of the forest not covered by the scale front are areas in which there is very little American beech. We are approaching the point where we can say that almost all of the beech trees on the ANF have been impacted by the scale. The remaining area of the forest not covered by the scale front has contains little beech. There are few beech trees in the canyon of the Clarion river.

The 2001 killing front is a line of consensus. In 2000 Bob and I collected % inch beech bark plugs from trees with tarry spots. These were all candidate trees that we concluded were on the killing front. Like everyone else we assumed that tarry spots reflect the tree's active resistance to invasion by *Nectria.* It was my failure to isolate *Nectria in* 2000 that led me to survey for the fungal fruiting bodies in 2001.

The State Pathologists for both WV (Clark Haynes) and PA (Tom Hall/ Barry Towers) have assure me that in their assessment of the killing front (for state reporting) they used evidence of tree death and beech snap to help them locate the killing front. It was this evidence that Bob and I used to determine where we would take our 2000 beech bark samples. Although, I failed to recover *Nectria* in 2000 I was sure my line was in the right place and decided to use another approach in 2001. I gathered the John Omer sketch-map data and transferred it to the maps I used in the defoliation survey. I paid particular attention to checking if areas of discolored beech crowns (mapped in 2000) had dead crowns in 2001. On a second flight I went looking for other areas to fill in the gaps in the data. The 2001 BBD killing front line was drawn so as to contain all records of dying beech to the North and East of it. To no ones surprise, the 2001 killing front is almost exactly where Bob and I had surveyed in 2000.

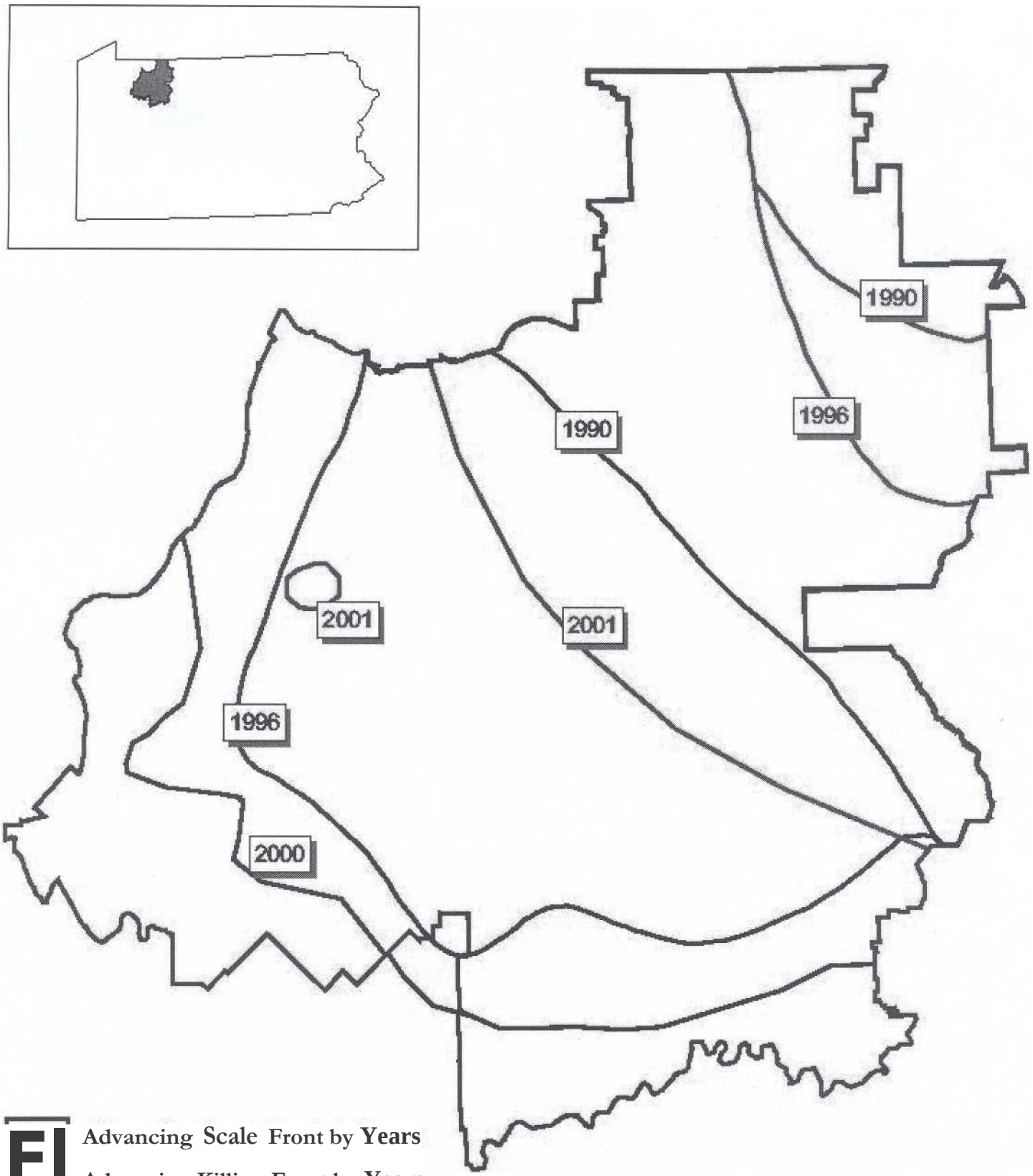
The only change is in the Hearts Content patch. Which lies several miles ahead of the general killing front. We have known for many years that not only were there dying beech at Hearts Content, but also that the *Nectria* involved was *N. ochroleuca*. While the 1999 defoliation survey map (DeLost/Chen 99) shows only 87 acres of gypsy moth defoliation within the forest boundary it also shows 1625 acres of yellowed Beech crowns. The majority of these yellowed crowns are located within the area I now show as the Hearts Content killing front. It is pleasing to see that old sketch maps can be used to confirm my current observations.

Martin MacKenzie
Forest Pathologist
FHP

CC D. Twardus
R. Acciavatti

Attacement jpeg file

Progress of BBD on the Allegheny National Forest



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